

IN THE CLAIMS

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1. (Original) A system for providing parallel processing of data to a plurality of digital signal processors (DSPs), comprising:
 - means for transmitting communication data to a load management system from a CPU;
 - means for selecting a digital signal processor (DSP) from a plurality of DSPs for processing the communication data;
 - means for processing the communication data using the selected DSP; and
 - means for transmitting the processed data back to the CPU and to a communication device.
 2. (Original) A system of claim 1, wherein the communication data is transmitted from a VoIP medium.
 3. (Original) A system of claim 1, wherein the communication data is transmitted from a FoP medium.
 4. (Original) A system of claim 1, wherein the communication data is transmitted from an IP to sonet medium.
 5. (Original) A system of claim 1, wherein the communication data is transmitted from an encoder/decoder.
 6. (Original) A system of claim 1, wherein the communication data is transmitted from a broadband communication medium.
 7. (Original) A system of claim 1, wherein the communication data is transmitted from an image processing medium.
 8. (Original) A system of claim 1, wherein the communication data is transmitted from a data modem.
 9. (Original) A system of claim 1, wherein the load management system comprises:

a plurality of direct memory access (DMA) devices having internal registers, a plurality of FIFOs, a plurality of state machines associated with the plurality of FIFOs, and a memory interface for interfacing the plurality of DMA devices with an external memory device;

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a plurality of status and controls registers coupled to the plurality of DMA devices;
a CPU interface for interfacing the CPU with the plurality of status and control registers;
and
a DSP interface for interfacing the plurality of DSPs with the plurality of DMA devices.

10. (Original) A system of claim 9, wherein the DSP interface includes a program/data memory and a ping pong memory.

11. (Original) A system of claim 9 further comprising an external memory, wherein the external memory is coupled to the plurality of DSPs through dedicated memory threads.

12. (Original) A system of claim 9, wherein the CPU interface includes a routing MUX, wherein the routing MUX is coupled to the external memory device.

13. (Original) A system of claim 12, wherein the external memory device comprises a memory access controller array.

14. (Original) A system of claim 12, wherein the external memory device comprises a memory management system.

15.-32. (Cancelled).